WHAT IS CLAIMED IS:

1. A nozzle for delivering a measured quantity of viscous liquid comprising:

    a) an opening defined by a perimeter and a cylindrically-shaped barrel wall extending from said perimeter downward to a break point defined by a circle spaced-apart from said opening;

    b) means for connecting said barrel wall of said nozzle to a reservoir from which a viscous liquid is transferrable to said nozzle;

    c) a cone-shaped wall extending downward from said circular break point and then inward therefrom to a circular exit opening; and,

    d) a straight, small-diameter exit tube, of uniform diameter, extending from said circular exit opening to a circular exit aperture for dispensing the liquid from said nozzle;

    e) wherein there is a controlled ratio of the internal diameter of said exit tube and the wall thickness of said exit tube.

2. The nozzle for delivering a measured quantity of viscous liquid of Claim 1 wherein said cone-shaped wall extending downward from said circular break point and then inward therefrom to a circular exit opening has a wall convergence between about 5° and about 20°.

3. The nozzle for delivering a measured quantity of viscous liquid of Claim 1 wherein said cone-shaped wall extending downward from said circular break point and then inward therefrom to a circular exit opening has a wall convergence of about 10°.

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4. The nozzle for delivering a measured quantity of viscous liquid of Claim 1 wherein the ratio of the internal diameter of said exit tube to the wall thickness of said exit tube exceeds 7.5

5. The nozzle for delivering a measured quantity of viscous liquid of Claim 1 wherein said opening is circular and said horizontal perimeter is about 25 mm in diameter.

6. A nozzle for delivering a measured quantity of viscous liquid comprising:

    a) a flaired opening defined by a horizontal perimeter and a flare wall extending inward from said perimeter;

    b) a cylindrically-shaped barrel wall extending from said flare wall downward to a break point defined by a circle parallel to said flare opening and spaced-apart therefrom;

    c) a cone-shaped wall extending downward from said circular break point and inward therefrom to a circular exit opening; and,

    d) a small-diameter exit tube extending from said circular exit opening to a circular exit aperture.

7. The nozzle for delivering a measured quantity of viscous liquid of Claim 6 wherein said cone-shaped wall extending downward from said circular break point and then inward therefrom to a circular exit opening has a wall convergence between about 5° and about 20°.

8. The nozzle for delivering a measured quantity of viscous liquid of Claim 6 wherein said cone-shaped wall extending downward from said circular break point and

then inward therefrom to a circular exit opening has a wall convergence of about 10°.

9. The nozzle for delivering a measured quantity of viscous liquid of Claim 6 wherein the ratio of the internal diameter of said exit tube to the wall thickness of said exit tube exceeds 7.5

10. The nozzle for delivering a measured quantity of viscous liquid of Claim 6 wherein said opening is circular and said horizontal perimeter is about 25 mm in diameter.

11. The nozzle for delivering a measured quantity of viscous liquid of Claim 6 wherein said flare wall extends inward from said perimeter about 5 mm.

12. The nozzle for delivering a measured quantity of viscous liquid of Claim 6 wherein said cylindrically-shaped barrel wall extends downward from said flare wall about 30 mm.

13. The nozzle for delivering a measured quantity of viscous liquid of Claim 6 wherein said cylindrically-shaped barrel wall extends downward from said flare wall at an angle of about 2° with the vertical.

14. The nozzle for delivering a measured quantity of viscous liquid of Claim 6 wherein said cone-shaped wall extends downward from said circular break point about 40 mm.

15. The nozzle for delivering a measured quantity of viscous liquid of Claim 6 wherein said cone-shaped wall extends downward from said circular break point at an angle of about 15° with the vertical.

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16. The nozzle for delivering a measured quantity of viscous liquid of Claim 6 wherein said cone-shaped wall extends downward from said circular break point to a circular exit opening having an opening of about 1.5 mm.

17. A nozzle for delivering a measured quantity of viscous liquid comprising:

    a) a small-diameter tube having at one first end formed by a circular exit aperture, from which the viscous liquid issues, said tube extending straight upward to a second end defining a circular entrance;

    b) a cone-shaped wall extending upward from said second end defining a circular entrance and outward to a planar circular surface break point;

    c) a cylindrically-shaped barrel wall extending upward from said planar circular surface break point and slightly outward to a circle lying in a plane parallel to the plane of said circular surface break point; and,

    d) a flared opening defined by a horizontal perimeter and a flare wall extending outward from said circle.

18. The nozzle for delivering a measured quantity of viscous liquid of Claim 17 wherein the diameter of said small-diameter tube is constant from said first end to said second end.

19. The nozzle for delivering a measured quantity of viscous liquid of Claim 17 wherein said cone-shaped wall extends upward from said second end defining a circular entrance and outward at an angle of about 15° from the vertical to said vertical break point.

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20. A method of making a nozzle for delivering a measured quantity of viscous liquid into minute spaces comprising the steps of:

a) placing a small circular tablet of a malleable metal, containing a majority of copper, on a circular die having a cylindrical extended inner wall;

b) advancing a conically-shaped mandrel against said tablet and forcing the metal to be drawn down into said die and along said cylindrical extended inner wall;

c) repeating steps a) and b) using progressively smaller-diameter, conically-shaped mandrels and progressively smaller diameter-circular dies having cylindrical extended inner walls until a nozzle is formed comprising:

d) a flared opening defined by a horizontal perimeter and a flare wall extending inward from said perimeter;

e) a cylindrically-shaped barrel wall extending from said flare wall downward to a break point defined by a circle parallel to said flare opening and spaced-apart therefrom;

f) a cone-shaped wall extending downward from said circular break point and inward therefrom to a circular exit opening; and,

g) a small-diameter exit tube extending from said circular exit opening to a circular exit aperture.